Please add the following new claims:

41. (New - Pending). A process of claim 38 and further including electronically detecting the presence of a round of ammunition within the chamber of the barrel.

42. (New - Pending). A process of claim 38 and further including monitoring the capacity of the voltage supply means.

43. (New - Pending). A process of claim 38 and further including preventing voltage from reaching the firing pin when the safety is in a safe position.

45. (New - Pending). The firearm of claim 1 and further including at least one indicator operatively connected to the system control means.

46. (New - Pending). The firearm of claim 1 and wherein the firing pin includes a forward conductive end for transmitting voltage to a round of ammunition within the chamber, and a rearward conductive area to receive voltage from the voltage increasing means.

47. (New - Pending). An electronic firearm, comprising:

a barrel;

a chamber in which a round of electrically fired ammunition is received;

a conductive firing pin for transmitting power to the round of ammunition;

a voltage supply for supplying power for initiating firing of the round of ammunition;

a system control powered by said voltage supply and monitoring the firearm, for controlling the firing of the round of ammunition, said system control including a switching means for isolating said firing pin from receiving power supplied by said voltage supply upon the occurrence of at least one of the following conditions:

a. insufficient energy to initiate the firing of the round of ammunition;

b. detection of voltage from said voltage supply below a predetermined level;

c. detection of voltage from said voltage supply above a predetermined level;

d. absence of a round of ammunition in said chamber;

e. lack of viability of the round of ammunition;

f. inactivity of the firearm for a predetermined time;

g. a system authorization switch being in an off position; and

h. failure of the system control or any component connected thereto;

a trigger assembly communicating with said system control and having a trigger, whereby as said trigger is activated, a signal is sent to said system control to initiate firing of the round of ammunition; and

said system control further including an electronic safety operatively connected to a firearm safety mechanism and responsive to activation of said firearm safety mechanism for

preventing power from reaching said firing pin and preventing said system control from detecting activation of said trigger.

48. (New - Pending). The electronic firearm of claim 47 and wherein said system control further comprises a voltage increasing means for increasing voltage received from said voltage supply to a voltage sufficient to initiate the firing of the round of ammunition.

49. (New - Pending). The electronic firearm of claim 48 and wherein said switching means isolates said voltage supply from said voltage increasing means.

50. (New - Pending). The electronic firearm of claim 48 and wherein said switching means isolates said voltage increasing means from said firing pin.

51. (New - Pending). The electronic firearm of claim 47 and further comprising an indicator communicating with said system control for indicating the status of the firearm.

52. (New - Pending). The electronic firearm of claim 47 and further comprising a system authorization switch communicating with said system control for controlling access to the firearm.

53. (New - Pending). The electronic firearm of claim 47 and further comprising an insulating coating applied to said firing pin.

54. (New - Pending). The electronic firearm of claim 47 and further comprising an insulating sleeve positioned about said firing pin.

55. (New – Pending) The electronic firearm of claim 47 and wherein said system control and electronic safety are adapted to isolate said firing pin when said firearm safety mechanism is in a safe position by rejecting signals received from said trigger (a) when said trigger is activated, and (b) when said trigger is activated and held while said firearm safety mechanism is moved from a safe position to a fire position.

56. (New - Pending). The electronic firearm of claim 47 and further including means for electronically detecting the presence of a round of ammunition in said chamber.

57. (New - Pending). The electronic firearm of claim 47 and wherein said firearm safety mechanism is movable between a fire and a safe position for placing the firearm in a nonoperative condition upon movement of said firearm safety mechanism to said safe position.

58. (New - Pending). The electronic firearm of claim 47 and wherein said system control includes programming to monitor and control the firearm including initiating the sleep mode for the firearm to place the firearm in a nonoperative condition.

59. (New - Pending). The electronic firearm of claim 47 and wherein said system control comprises at least one of the following: a microprocessor, microcontroller, software, firmware, microcode, digital logic, analog logic, and custom integrated logic.

60. (New - Pending). An electronic firearm, comprising:

a barrel;

a chamber in which a round of electrically initiated ammunition is received;

a firing pin;

a trigger for initiating firing of the round;

a voltage supply for supplying power to said firing pin for firing the round;

a system control for monitoring the firearm and controlling the power supplied to said firing pin in response to at least one condition selected from:

a. insufficient energy to initiate the firing of the round of ammunition;

b. detection of voltage from said voltage supply below a predetermined level;

c. detection of voltage from said voltage supply above a predetermined level;

d. inactivity of the firearm for a predetermined time;

e. a system authorization switch being in an off position;

f. failure of any electronically controlled and operated components of the firearm; and

g. failure of said system control or any component thereto;

said system control including a switching means for isolating said firing pin from said voltage supply to prevent the firing of the round of ammunition, and an electronic safety responsive to activation of a firearm safety for isolating said firing pin and preventing said system control from receiving a signal responsive to activation of said trigger.

61. (New - Pending). The electronic firearm of claim 60 and further including a voltage increasing means connected to said voltage supply and said firing pin for transmitting an increased voltage to said firing pin for firing the round of ammunition.

64. (New - Pending). The electronic firearm of claim 60 and further comprising at least one indicator communicating with said system control means for indicating the status of the firearm.

65. (New - Pending). The electronic firearm of claim 60 and wherein said firing pin comprises a forward conductive end for transmitting voltage to a round of ammunition within the chamber, and a rearward conductive area to receive voltage from the voltage supply.

66. (New - Pending). The electronic firearm of claim 60 and wherein said firing pin further includes an insulating coating applied thereto.

67. (New - Pending). The electronic firearm of claim 60 and further including an insulative sleeve positioned about said firing pin.

68. (New - Pending). The electronic firearm of claim 60 and further including a means for detecting the presence of a round of ammunition in said chamber.

69. (New - Pending). The electronic firearm of claim 60 and further comprising a system authorization switch communicating with said system control means for controlling access to the firearm.

73. (New - Pending). A method of firing a round of electrically-initiated ammunition from an electronic firearm, comprising:

Monitoring a sequence of operative conditions with a system control;

Sending a signal to the system control upon activation of a trigger;

Controlling and coordinating distribution of power to a firing pin, including isolating and preventing the firing pin from receiving power upon the occurrence of at least one condition selected from:

a. the firearm being in a sleep mode;

b. insufficient energy to initiate the firing of the round of ammunition;

c. detection of voltage from a voltage supply below a predetermined level;

d. detection of voltage from a voltage supply above a predetermined level;

e. absence of a round of ammunition in a chamber of the firearm;

f. lack of viability of the round of ammunition;

g. inactivity of the firearm for a predetermined time;

h. failure of any electronically controlled and operated components of the firearm;

i. a system authorization switch being an in off position;

j. a safety mechanism of the firearm being in a safe position;

Preventing the system control from accepting a signal from the trigger generated by actuation of the trigger when the safety mechanism of the firearm is in the safe position;

Transmitting power to the firing pin from the voltage supply for transmission to the round of ammunition; and

Applying power to the round of ammunition.

74. (New - Pending). The method of claim 73 and wherein controlling and coordinating distribution of power to the firing pin includes increasing voltage in a voltage increasing means.

75. (New - Pending) An electronic firearm, comprising:

a barrel;

a chamber in which a round of electrically initiated ammunition is received;

a firing pin;

a trigger for initiating firing of the round;

a voltage supply for supplying power to said firing pin for firing the round;

a system control for monitoring the firearm and controlling the power supplied to said firing pin in response to malfunction or failure of the system or any component connected thereto, said system control including a switching means for isolating said firing pin from said voltage supply to prevent the firing of the round of ammunition; and

a means for detecting the presence of a round of ammunition in the chamber.

85. (New - Pending). A method of firing a round of electrically-initiated ammunition from a firearm, comprising:

receiving a round of ammunition within a chamber;

sending a signal to a system control to initiate firing of the round of ammunition as a trigger is activated;

supplying power from a voltage supply for initiating firing of the round of ammunition;

electronically detecting the round of ammunition within a chamber of the firearm;

monitoring the firearm with the system control and controlling the firing of the round of ammunition with the system control;

isolating a firing pin of the firearm from receiving power supplied by the voltage supply upon the detection of at least one of the following conditions by the system control:

a. insufficient energy to initiate the firing of the round of ammunition;

b. detection of voltage from the voltage supply below a predetermined level;

c. detection of voltage from the voltage supply above a predetermined level;

d. absence of a round of ammunition in the chamber;

e. inactivity of the firearm for a predetermined time;

f. an authorization switch being in an off position;

g. failure of any electronically controlled and operated components of the firearm; and

h. failure of the system control; and

transmitting power to the round of ammunition through the firing pin.

86. (New - Pending). The method of claim 85 and further comprising increasing the voltage from the voltage supply to a level sufficient to initiate the firing of the round of ammunition, in a voltage increasing means, and isolating the voltage supply from the voltage increasing means.